

### **REMARKS/ARGUMENTS**

Claims 17-21 are pending in this application. Claims 17-21 are rejected. Claims 17 and 18 have been amended.

The Examiner rejects claims 17-21 under 35 U.S.C 102(b) as being anticipated by Lauder ('583). The Examiner states that Lauder discloses a perovskite catalyst of the type required in the present invention for use in a catalytic converter of an internal combustion engine, but it does not disclose a fuel injector. However, the Examiner further states that an engine as taught by Lauder would inherently possess a fuel injector, and therefore Lauder teaches each and all the elements required in the present invention.

For the following reasons, the Applicants respectfully traverse the Examiner's rejection. The fuel injector of the present invention is coupled to a port in the wall of the catalytic reactor; the port and therefore the fuel injection being upstream of the catalyst, as claimed in amended claim 17. Therefore, in the present invention it is not the engine, but the catalytic reactor itself which includes a fuel injector for injecting fuel into the exhaust gas prior to the exhaust gas passing through the catalyst. The fuel is used as reductant. Although Lauder may teach an engine with a fuel injector, such a teaching is irrelevant to the present invention since the catalytic reactor itself requires a fuel injector. Lauder does not teach this required element of the invention as recited in claim 17. Therefore, the Examiner has failed to show the identical invention as embodied in claim 17, in Lauder, and hence the rejection of claim 17, and dependent claims 18-21 under 35 U.S.C 102(b) in view of Lauder cannot be sustained in view of this reference.

The Examiner also rejects claims 17-21 under 35 U.S.C 102(b) as being anticipated by Volin ('852) on the same grounds as for Lauder ('583). Applicants respectfully traverse the Examiner's rejection for the same reasons provided above. Specifically, Volin does not teach a catalytic reactor having a port coupled to a fuel injector which is positioned upstream a catalyst mounted inside the catalytic reactor. Therefore, Volin does not disclose the present invention in its entirety, and a 35 U.S.C 102(b) rejection based on this reference cannot be sustained.

The Examiner further rejects claims 17-19 under 35 U.S.C 102(b) as being anticipated by Takase ('691). The Examiner states that Takase discloses a catalytic reactor which includes a catalytic substance, inlets and outlets and a fuel injector upstream of the catalytic reactor, hence anticipating the present invention as recited in claims 17-19. Applicants traverse the Examiner's rejection for the following reasons. As previously discussed, the present invention requires a fuel injector coupled to a port in the wall of the catalytic reactor which is positioned upstream of a catalyst which is inside the and not upstream of the catalytic reactor as taught by Takase. Therefore, the present invention is not disclosed with all its elements in Takase and rejection cannot be sustained in view of this reference.

The Examiner still further rejects claims 20-21 under 35 U.S.C 103(a) as being unpatentable over Takase in view of Lauder or Volin. For the following reasons the Applicants respectfully traverse the Examiner's rejection. MPEP 2143 states that "to establish a *prima facie* case of obviousness three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge

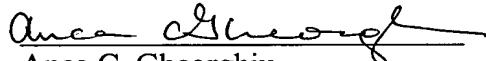
generally available to one of ordinary skill in the art, to modify the reference or combine reference teachings. Second, there must be reasonable expectation of success. Finally, the prior art must teach or suggest all the claim limitations.” As discussed above neither Takase, Lauder nor Volin nor the combination therefore teach all the claim limitations of the present invention. Therefore, the Examiner has not established a *prima facie* case of obviousness, and the rejection cannot be sustained in view of the combination of references cited.

Based upon the above amendments, remarks, and papers of records, applicant believes pending claims 17-21 of the above-captioned application are in allowable form and patentable over the prior art of record. Applicant respectfully requests that a timely Notice of Allowance be issued in this case.

Applicant believes that no extension of time is necessary to make this Reply timely. Should applicant be in error, applicant respectfully requests that the Office grant such time extension pursuant to 37 C.F.R. § 1.136(a) as necessary to make this Reply timely, and hereby authorizes the Office to charge any necessary fee or surcharge with respect to said time extension to the deposit account of the undersigned firm of attorneys, Deposit Account 03-3325.

Please direct any questions or comments to Anca C. Gheorghiu at (607) 974-3322.

Respectfully submitted,



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